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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,824	03/23/2004	Masatake Tamaru	04023/LH	3703
1933	7590	05/30/2006	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 Fifth Avenue 16TH Floor NEW YORK, NY 10001-7708			BELLINGER, JASON R	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/806,824	TAMARU ET AL.	
	Examiner	Art Unit	
	Jason R. Bellinger	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

1. Claim 1 is objected to because of the following informalities: The term "via" does not describe any physical structure of the invention, and should therefore be removed from the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Latham. In Figure 15, Miller shows a crawler track tension adjusting device 450 including a hydraulic actuator (364, 366) operable with hydraulic oil to control the tension on a crawler belt 238. The inflow of oil into the actuator (364, 366) is equal to the outflow to allow the actuator (364, 366) to operate in both a direction to increase and decrease the tension on the belt 238. An operating condition detector 454 is disposed in the hydraulic circuit, and detects the operating condition of the actuator (364, 366). A piston rod 400 of the actuator (364, 366) projects from the front end of a cylinder 398 and is coupled to a yoke 252 for supporting an idler 232.

Miller does not specifically disclose that the device includes a hydraulic pump that is run by an electric motor to actuate the actuator, nor that the actuator is a double rod cylinder. In figure 1, Latham teaches the use of a hydraulic actuator formed as a double rod cylinder having a cylinder 20, a piston 22 slidable within the cylinder 20, and

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a piston rod with portions (28 & 30) located at the front and rear ends of the piston 22.

The pressure active areas of the front and rear chambers (32 & 34) are equal. A

hydraulic pump 14 is driven by an electric motor 10. An operating condition detector 36

is disposed in a hydraulic circuit that connects the pump 14 to the actuator. The detector

36 detects the operating condition of the actuator, and the motor 10 is controlled in

accordance to the signal (received by a controller 40) from the detector 36.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tension system of Miller with a tension device having a double rod cylinder actuator, motor, and pump all controlled by a controller dependent upon signals from a operating position detector, as a substitution of equivalent hydraulic system, dependent upon cost and availability.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Latham as applied to claims 1-3 above, and further in view of Bricknell. Miller as modified by Latham does not specify that the pump includes an oil tank integrally formed therewith.

Bricknell teaches the use of a tension adjusting device including a pump 23 that includes an integrally formed tank, which may hold oil. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tension system of Miller as modified by Latham with a pump with an integral oil tank, for the purpose for providing a closed pump system with a fluid supply without

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requiring a separate oil tank mounted elsewhere on the vehicle, thus reducing components and required space.

5. Claims 5-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Latham as applied to claims 1-4 above, and further in view of Thomas et al. Miller shows a valve 456 for controlling the direction in which the actuator (364, 366) operates. The operating condition detector (36 of Latham) acts as a stroke sensor, and the signal is received by a controller (40 of Latham).

Miller as modified by Latham does not show the valve being an electromagnetic valve. Thomas et al teaches the use of an electromagnetic valve 23 in a hydraulic system. The system is hermetically sealed in a casing 77. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the system of Miller as modified by Latham with an electromagnetic valve, as a substitution of equivalent parts, dependent upon cost and availability.

Furthermore, it would have been obvious to one of ordinary skill in the art to provide all of the elements of the hydraulic tensioning system of Miller as modified by Latham in a hermetically sealed casing, in order to prevent damage to any part of the system during operation, and to prevent any hydraulic fluid leaks from contaminating the environment.

Response to Arguments

6. Applicant's arguments with respect to claims 1-8 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

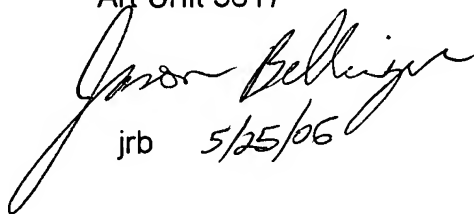
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason R Bellinger
Examiner
Art Unit 3617


jrb 5/25/06